

SOAR Teleconference #1

21 September 2011, 10:00 – 10:40am

Participants: Sue Moore, Phyllis Stabeno, Lisa Guy, Jackie Grebmeier, Robert Suydam, Robyn Angliss, Chad Jay, Tim Ragen, Craig George, Vera Metcalf, Chris Clark

Introduction – Sue Moore

The Synthesis of Arctic Research (SOAR) is just getting off the ground. The interagency agreement between BOEMRE/Alaska Region and NOAA/PMEL was signed in May. The purpose of this first teleconference is to try to get people thinking about potential science themes, in advance of the first SSC meeting in November. These themes should synthesize from a broad suite of projects, including BOEMRE-funded projects, but also branching out to include relevant projects from other organizations (i.e., NSF, industry, NOPP). SOAR should draw from the expertise of the SSC and also identify a broader group of science contributors that we could convene at workshop (i.e. Workshop I) early next year.

SOAR funding

SOAR has five years (2011-16) of support. The first phase will be three years focused on the Science Themes discussed at the SSC meeting in November, and fleshed out at Workshop I. The second phase will focus on additional projects that result from the initial Science Themes.

The first meeting of the SSC will be in Seattle during 1-3 November.

The project can pay travel for SSC meetings and for invited participants to Workshop I. Flights will be paid for directly by NOAA/PMEL. Lodging, meals and incidental expenses will be reimbursed. Funding of identified analysis work to reach goals within science themes will be available. We will produce science products in the form of peer-reviewed articles/special issue, rather than an overarching SOAR Project report. Heather Crowley is the BOEMRE Contracting Officer Representative (COR) for the SOAR project.

The main focus of this call is to encourage the SSC to begin thinking about broad Science Themes and questions. Perhaps there are some research questions that you have been interested in for a while. These draft themes are straw-person themes to serve as a starting point for discussion, to generate thinking for the October conference call, and to give us a foundation for our work in the November meeting. Comments now are welcomed. The contributor line under the title of each draft Science Theme (see meeting agenda) is not set in stone, but SSC members should begin thinking about who to invite to Workshop I, how many people to include, and when work within each theme will be done. We are expecting about 50 people to attend the first workshop.

Review of the draft Science Themes

1. Seasonal sea ice – Primary Production – Trophic Linkages –

Pelagic/Benthic coupling: Step changes from the 1970s-2010?

- This theme begins with sea ice in the Arctic and its effect on primary production and incorporates various BOEMRE projects. This theme focuses on what is happening in the ecosystem with regard to seasonal ice change. It will likely include Karen Frey's work with satellite images and step changes over that period of time. This is a broader timeline than just the period of oil and gas exploration. Can we identify any ecosystem shifts with regard to the record we have from the satellite workshop?

2. Benthic record of production hotspots from the Northern Bering to Amundsen Gulf: A framework to assess ecosystem heterogeneity and change?

- Related, in part, to the Distributed Biological Observatory (DBO) work that Jackie and Sue have done

3. Wind-Currents-Hydrography-Zooplankton-Fishes-Whales: production, advection & upwelling of prey from the Northern Bering to the Beaufort Sea

- How prey are affected; specifically drawing on BOWFEST

4. Acoustic Ecology of the Chukchi and Beaufort Seas

- Anthropogenic sound footprint (i.e., vessel traffic, wind on water vs. wind on ice, etc.), drawing upon work of NOAA Acoustic Working groups and other ongoing studies. Chris Clark noted potential for linkages between this theme and theme #1 re. sea ice contributing to the ambient noise environment, also the potential for linkage to other themes. Such linkages would be encouraged under the synthesis project

5. Marine Mammal Tracks in the Pacific Arctic: assessment of seasonal movements & habitat use

- Ask for contributions from all tagged animals over the years for broader habitat use synthesis. See Barbara Block's recent paper on Pacific marine predator movements. [Block et al. 2011. Tracking apex marine predator movements in a dynamic ocean. Nature 475:86-90]. Lloyd Lowry & Kathy Frost have started to bring some data together and will present a poster in Hobart (Biologging 4, March 2011).
- This theme is focused on tagged animals, but one of the papers within this theme might focus on aerial survey data that have been collected since the 1980s.

Publication of 2 - 4 papers under each theme is the goal. With data that we have or know of, what can we bring together, especially if it can be supported by some funding such as a post doc or grad student, or someone already in the lab? There

will be funding available under each theme. Not a huge amount, but enough to fund a post doc or a couple of grad students. Start thinking about where the data are and what will be required to bring the data together.

Seabirds are not currently part of the draft science themes. As outlined in the original 2-page study plan, BOEMRE wanted a synthesis of physical oceanography to marine mammals. Seabirds may fall into the gradient between physics and marine mammals and could fit in to this synthesis.

Special emphasis will be placed on BOEMRE projects. BOEMRE listed specific projects they wanted a synthesis of in the work plan. However, they agreed to also include relevant outside research (NSF, NASA, etc.). Science themes are broad for this reason. Our science themes should provide the framework for the synthesis, and we can flesh out more specific ideas in the larger workshop.

Timing of big Workshop 1

During Workshop I, we will set up Analytical Teams to do the work identified under each Science Theme. We hope to have this meeting in February or March, probably in Anchorage or Seattle. We will figure out which other contributors we need to invite to the workshop. When can we meet?

Some meetings already scheduled during this time are the Ocean Sciences meeting in Salt Lake City, the Sikuliaq workshop, and the Open Water Meeting.

Based on comments from all SSC members on the teleconference on availability, we would like everyone to try to hold the weeks of March 12th and/or the week of March 19th open for Workshop I.

Other SOAR news

Lisa and Peggy Sullivan are working on a SOAR website. It will have pages with the science themes; SSC names, photos, and affiliations; links; and also a password-protected SSC portal where we can share documents (meeting notes, agendas, etc.) and announcements. We hope to have it up by the end of the month. If SSC members have a photo they would like used for the site, please send it to Lisa. The web address will be:

<http://www.arctic.noaa.gov/soar>

Lisa will present a poster at the Alaska Marine Science Symposium introducing the SOAR project. She would like to list the names of the SSC members on the poster. If anyone would prefer not to be listed just let her know.

We will provide information soon on how to make your hotel and flight reservations for the November meeting in Seattle.